



**NOTE:**

1. FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES, SEE DWG. E-1.
2. LEAVE 3' OF COILED CABLE (TAG & TAPE CONDUCTOR ENDS) AT EXISTING SPEAKER. DISCONNECTION OF EXISTING SPEAKER CIRCUIT WIRING AND FINAL CONNECTION TO EXISTING SPEAKER WILL BE MADE BY OTHERS.
3. DISCONNECTION AND REMOVAL OF EXISTING TENANT AMPLIFIER AND ASSOCIATED WIRING UP TO THIS LAST SPEAKER, AND CONNECTION OF E.O.L. RESISTOR AT THE LAST SPEAKER WILL BE MADE BY OTHERS AFTER INSTALLED SPEAKERS ARE TESTED AND OPERATIONAL.
4. LEAVE 3' OF COILED CABLE (TAG & TAPE CONDUCTOR ENDS) AT EXISTING SPEAKER. REMOVAL OF THE EXISTING E.O.L. RESISTOR AND FINAL CONNECTION TO EXISTING SPEAKER WILL BE MADE BY OTHERS.
5. REMOVE OLD SPEAKERS AS DIRECTED BY THE ENGINEER AND PROVIDE PATCHING AS PER INDICATED PATCHING DETAIL NUMBER NEXT TO THE OLD SPEAKER. DISCONNECTION OF OLD SPEAKERS WILL BE MADE BY OTHERS.
6. FOR REMOVAL AND PATCHING PLAN DETAILS (P-1, P-2, P-3 & P-4), SEE DWG. A-1.
7. THIS COMBINATION SPEAKER/STROBE AND ASSOCIATE CONDUIT ARE ALSO SHOWN ON STROBE INSTALLATION PLAN DWG. E-5.

**SPEAKER CIRCUIT/LOADING TABLE**

SPEAKER TAP/dB SETTING	Watts	1/8	1/4	1/2	1	2	4	TOTAL POWER (Watts)	CIRCUIT LENGTH (ft.)
SPK-A	2	4	5	4	-	-	-	7.750	525
SPK-B	6	2	6	3	-	-	-	7.250	550
SPK-C	2	11	2	1	-	-	-	5.000	625
SPK-D	1	11	2	4	-	-	-	7.875	465
GRAND TOTAL								27.875	2165

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**THE PORT AUTHORITY OF NY & NJ**

*Peter K. Surway*  
ENGINEERING PROGRAM MANAGER  
W.T.C.  
*J. B. Surway*  
CHIEF ELECTRICAL ENGINEER

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS CONSTITUTING A PART OF CONTRACT NO. \_\_\_\_\_ IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.

DATE 7/16/97 *[Signature]* SPEC. WRITER  
DATE 7/18/97 *[Signature]* ENGINEER OF DESIGN

No. Date Revision Approved

Engineering Department  
Design Divisions  
**The World Trade Center**

Title  
**FIRE ALARM SYSTEM  
DEVICE UPGRADE  
PHASE III**  
  
**ELECTRICAL**  
  
**1 WTC  
46th FLOOR  
SPEAKER INSTALLATION  
AND REMOVAL PLAN**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

S. FELDSTEIN B. FALDU  
Designed by Drawn by Checked by

Date 2/4/97 Scale AS SHOWN  
Contract Number Drawing Number  
**WTC-861.077 E-3**

